

A b s t r a c t

A method for exchange of vertical information in a layered redundant deployed network is disclosed. At an endpoint side, a first message, e.g. a user registration message, is vertically being sent upwards from layer to layer. For each passed node, an address list of peers in the current layer is added to the message. When reaching the uppermost layer, all the address lists added to the message are being stored in a node in that layer. A second message confirming the first message is being sent from the latter node in the opposite vertical direction from layer to layer, wherein said second message always contains the addresses of the previously passed node and its redundant peers. These addresses are stored in each node receiving said second message. Consequently, the uppermost layer at the endpoint side will know all the alternative routes for transmitting messages vertically towards the lowermost layer. Also, for messages to be sent upwards, each node in all the layers will know the addresses of the nodes in the above layer. The invention disclosed provides short implementation time, and limits its processing overhead during normal execution without reducing redundancy.